

Appln. No. 10/519,895
Amdt. Dated April 14, 2006
Reply to Office Action of December 29, 2005

REMARKS

Claims 1, 4, and 7-8 were rejected by the Examiner as being anticipated by United States Patent Publication No. 2001/0021089 to Miyauchi et al. Claims 1 and 8 have been amended to more clearly define Applicant's invention. In particular, claim 1 now provides that the magnetic shield layer and a layer of the device between the magnetic shield layers comprise a same material.

Page 10 lines 23-29 of Applicant's specification provides the following:

...the first and second magnetic shield layers 60a, 60b may be formed by the sputtering technique. And what is important herein is that the composing elements of the targets which are used in forming the soft magnetic layers constituting the first and the second magnetic shield layers 60a, 60b are common to a part of the elements of the target to be used for forming various layers of the MRAM device 10.

Miyauchi does not disclose a device in which the magnetic shield layers and a layer of the device have a same material. Because claim 1 is not anticipated by Miyauchi, Applicant respectfully requests reconsideration and allowance of claim 1. Claims 3-7 depend from claim 1. Applicant asserts that because claim 1 is allowable, claims 3-7 are also allowable.

The method of claim 8 now provides that the target used for forming the shield layers is the same as a target for forming a layer located between the magnetic shield layers. Page 10, line 30- page 11; line 8 provides:

Appln. No. 10/519,895
Amdt. Dated April 14, 2006
Reply to Office Action of December 29, 2005

In other words, targets such as Fe, Co, Pt, Mn, Al and the like for forming the TMR device section 40 and the targets for forming the first and second magnetic shield layers 60a, 60b may be provided in a single sputtering chamber, thereby enabling to the various layers in a common chamber. This means that any possibility of introducing impurities that may adversely affect the storage and holding characteristic of the MRAM device 10 can be suppressed at the time of forming the MRAM device 10 having the first and second magnetic shield layers 60a, 60b. Additionally, it helps to cut production cost and improves production yield.

Miyauchi does not disclose a method for manufacturing a magnetic non-volatile memory device wherein a target used in forming at least one of the shield layers is the same as a target for forming a layer located between the magnetic shield layers. Therefore, claim 8 is not anticipated by Miyauchi. Applicant requests reconsideration and allowance of claim 8.

Claim 3 was rejected by the Examiner under 35 U.S.C. 103 (a) as being unpatentable over Miyauchi in view of United States Patent 6,648,990 to Yoshikawa; claim 5 was rejected as being unpatentable over Miyauchi in view of United States Patent No. 5,880,910 to Shouji; and claim 6 was rejected as being unpatentable over Miyauchi in view of United States Patent No. 6,717,845 to Saito. Applicant asserts, for the reasons stated above that claim 1 is patentable. Claims 3 and 5 and 6 depend from claim 1. Applicant asserts that because claim 1 is patentable, claims 3, 5 and 6 are also patentable. Applicant respectfully requests reconsideration and allowance of claims 3, 5, and 6.

In light of the foregoing, Applicants submit that the application is now in condition for allowance.

Appln. No. 10/519,895
Amdt. Dated April 14, 2006
Reply to Office Action of December 29, 2005

Should the Examiner have any questions regarding this Amendment, he is invited to contact the undersigned at (312) 704-1890.

Respectfully submitted,

Date: 4/14/06

Paige A. Kitzinger
Robert Depke, Reg. No. 37,607
Paige A. Kitzinger, Reg. No. 45,219
~~Trexler, Bushnell, Giangiorgi,~~
Blackstone & Marr, Ltd.
105 W. Adams, 36th Floor
Chicago, Illinois 60603
Tel: (312) 704-1890
Attorneys for Applicant

Page 7 of 7